

SmartWay at Osram Sylvania

Granite State Clean Cities Coalition
Portsmouth, NH
December 3, 2010



Company & Facility Background



Automotive Lighting

- Hillsboro, NH
- 600+ associates
- Manufactures Automotive lighting products
- Supplies both OEM and Aftermarket customers
- Ships between 9 to 14 million light sources per month
- If it lights up in/on your car, truck, SUV, motorcycle or snowmobile, we make it or our plant in Germany makes it
- We ship via truck, plane or ocean freight
- We supply automotive lighting to every major car manufacturer in the world
- Additional manufacturing facilities in Germany, Italy, Slovakia and China



OEM Customer Shipments in 2010

- Ford Parts & Service
- Chrysler
- GM
- NAL
- ACH (Sandusky)
- Carplastic
- MOPAR
- VW
- Valeo Seymour
- Xenia
- Hella
- Meridian
- Car Plastic
- Valeo Illumination
- Litek
- Grote

International Shipments in 2010

- Germany
- Japan
- England
- Korea
- India
- Mexico
- Canada
- Australia
- Saudi Arabia
- Singapore
- Indonesia
- Taiwan
- Italy
- China
- Brazil
- France
- Thailand

International Suppliers Locations

- Germany
- Korea
- Slovakia
- Germany
- India
- China
- Italy
- Mexico
- Thailand

SmartWay

SmartWay Transport Partnership

U.S. Environmental Protection Agency

The SmartWaySM Transport Partnership is a voluntary public-private initiative designed to improve the environmental performance of the freight delivery system in the United States through money saving, market-based approaches.

The Challenge:

- 85% by value of U.S cargo moves via Truck
- Trucking employs 10 million people
- 4% by value of U.S. cargo moves via Rail
- Trucks consume 20% of energy used by transportation sector
- Ground Freight is responsible for 20% of Carbon Dioxide (CO₂) Emissions

The Solution: SmartWay Partnership with Carriers and Shippers working to reduce greenhouse gas emissions and improve fuel efficiency.



SmartWay Transport Partnership

U.S. Environmental Protection Agency

What Can Shippers Do?

- Use SmartWay Carriers
- Increase Intermodal Shipping Where Possible
- Move Freight via Full Truckload
- Provide Driver Comfort Stations to Eliminate Need to Idle
- Electric Forklifts
- Efficient Dock Operations to Reduce Wait Time

Benefits:

- Better understand the environmental impact of OSRAM Sylvania transportation
- Reduce environmental impact
- Community and industry leadership



OSRAM Sylvania Usage of SmartWay Carriers – CY2009

Yes, a score of 1.08 qualifies you to use the logo

Provider	Provider's Total Mileage w / Fleet (miles)	Provider's Total Weight w / Fleet (tons)	# of Trips	SIF Score for Provider	Score based on Ton-Miles
					1.08
Averitt Express	11,205,385	7,820	18,565	1.25	0.04
UPS	115,077,558	2,618	179,591	1.25	0.01
CoreTrans, LLC	19,018,626	16,998	31,700	1.00	0.07
Con-way Freight	18,487,457	6,685	24,608	1.25	0.04
Southeastern Freight Lines	6,377,635	9,228	20,210	1.00	0.02
Estes Express Lines	8,173,170	4,170	16,376	1.25	0.02
Lakeville Motor Express, Inc	4,116,368	5,925	15,202	1.00	0.01
YRC Worldwide Inc. (Charter Partner)	13,422,096	5,350	13,822	1.25	0.05
Ward Transport and Logistics	1,757,035	3,821	10,025	1.00	0.00
FedEx Express Corporation (Charter Partner)	9,252,202	97	9,303	1.25	0.00
UPS Freight/Supply Chain Solutions (Asset based)	4,116,570	2,509	8,605	1.25	0.01
Heartland Express	5,724,380	6,436	7,514	1.25	
Milan Express Co., Inc.	1,463,449	2,435	6,880	0.75	
Online Transport, Inc.	6,924,493	15,428	6,695	1.00	
Wadhams Enterprises, Inc.	976,217	2,222	5,850	1.25	
New Penn Motor Express, Inc.	1,517,768		3,891	1.25	
RPM Transportation, Inc.	1,610,336			1.00	
FedEx Freight System, Inc.	2,555,100			1.25	
USF Companies	1,731,050			1.25	
Pohl Transportation, Inc.	1,374,000			1.25	0.01
Eagle Express, Inc.	609,196			1.25	0.03
Pacer Transportation	3,548,560			1.25	0.22
FedEx Freight	2,392,519		2,293	1.25	0.01
Schenker, Inc.	651,827	211	1,144	1.25	0.00
UPS Freight/S	470,737	151	608	1.25	0.00
USF Companies	179,389	182	552	1.25	0.00
Challenger Motor	123,526	1,632	551	1.25	0.00
Schenker, Inc.	979,246	171	514	1.25	0.00
Knichel Logistics	190,688	3,203	505	1.25	0.01
Total	254,300,995	249,174	443,853		1.08

**254,300,995
Miles**

**249,174
Tons of Freight**

**Shippers
SmartWay Score
1.08**

SYLVANIA



OSRAM Sylvania Footprint CY 2009

Provider Fleets' Assessment								
Provider	Provider's Total Mileage with Fleet (miles)	Provider's Total Weight w / Fleet (tons)	# of Trips	Miles per Trip (miles)	Weight per Trip (tons)	Ton-Miles per Trip (ton-miles)	Total Emissions (tons)	Est. Fuel Use (gal diesel)
							Based on Mileage...	
							CO ₂	
Averitt Express	11,205,385	7,820	18,565	603.58	0.42	4,719,963	22,820.5	2,041,076
UPS	115,077,558	2,618	179,591	640.78	0.01	1,677,551	234,362.6	20,961,537
CoreTrans, LLC	19,018,626	16,998	31,700	599.96	0.54	10,198,063	38,732.6	3,464,269
Con-way Freight	18,487,457	6,685	24,608	751.28	0.27	5,022,296	37,650.8	3,367,516
Southeastern Freight Lines	6,377,635	9,228	20,210	315.57	0.46	2,912,064	12,988.4	1,161,695
Estes Express Lines	8,173,170	4,170	16,376	499.09	0.25	2,081,224	16,645.2	1,488,754
Lakeville Motor Express, Inc.	4,116,368	5,925	15,202	270.78	0.39	1,604,360	8,383.2	749,802
YRC Worldwide Inc. (Chart)	13,422,096	5,350	13,822	971.07	0.39	5,195,212	27,334.9	2,444,853
Ward Transport and Logistics	1,757,035	3,821	10,025	175.27	0.38	669,689	3,578.3	320,046
FedEx Express Corporation	9,252,202	97	9,303	994.54	0.01	96,470	18,842.7	1,685,301
UPS Freight/Supply Chain Solutions	4,116,570	2,509	8,605	478.39	0.29	1,200,288	8,383.6	749,839
Heartland Express	5,724,380	6,436	7,514	761.83	0.86	4,903,129	11,658.1	1,042,704
Milan Express Co., Inc.	1,463,449	2,435	6,880	212.71	0.35	517,950	2,980.4	266,569
Online Transport, Inc.	6,924,493	15,428	6,695	1034.28	2.30	15,956,845	14,102.2	1,261,306
Wadhams Enterprises, Inc.	976,217	2,398	5,850	166.87	0.41	400,166	1,988.1	177,819
New Penn Motor Express, Inc.	1,517,768	1,823	4,891	310.32	0.37	565,711	3,091.0	276,464
RPM Transportation, Inc.	1,610,336	1,743	4,747	339.23	0.37	591,282	3,279.5	293,325
FedEx Freight System, Inc.	2,555,103	1,392	3,729	685.20	0.37	953,795	5,203.6	
USF Companies	1,731,097	950	3,627	477.28	0.26	453,417	3,525.5	
Pohl Transportation, Inc.	1,374,002	19,553	2,246	611.76	8.71	11,961,648	2,798.2	
Eagle Express, Inc.	609,196	13,330	2,128	286.28	6.26	3,816,063	1,240.7	
Pacer Transportation Solutions	3,548,560	14,572	2,084	1702.76	6.99	24,812,676	7,226.0	
FedEx Freight System, Inc.	2,392,519	427	1,293	1850.36	0.33	790,105	4,872.0	
Schenker, Inc.	1,651,827	211	1,144			304,664	3,364.0	
UPS Freight/Supply Chain Solutions	470,737	151	608			2,910	958.7	
USF Companies	179,389	182	555				365.3	
Challenger Motor Freight, Inc.	123,526	1,632	5				251.6	
Schenker, Inc.	979,246	171	5				1,994.3	178,371
Knichel Logistics	190,688	3,243	5				388.3	31,134
Non Smartway Carrier	5,195,278	53,669	34,930				10,580.5	946,327
Totals:	254,300,995	249,174	443,853			11,221	517,900	46,321,279

517,900
tons of CO₂

46,321,279
Gals of Diesel

Based upon EPA rate of 1,847.5 g/mile

SYLVANIA



OSRAM Sylvania Smart Way Shipper

Reduce Usage of Non-Smartway Carriers

	CY2006	CY2009
CO ₂ – tons	68,519	10,581
Miles	33,644,511	5,195,278
Weight – tons	419,681	10,581

Reduced CO₂ Output by Non-Smartway Carriers by 83%



Sustainability



■ Sylvania is committed to working jointly with our customers and transportation providers to continually evaluate our Supply Chain to find ways to reduce our emissions.



■ Sylvania is a SmartWay Shipper Partner and will proudly display the logo as we work to increase our overall participation.



Osram Sylvania: Our Big GREEN Picture



Global Care

Launched Global Care corporate responsibility platform in 2007



Global Care represents
OSRAM SYLVANIA's commitment to
environmental and social responsibility.

Global Care represents our commitment to social and environmental responsibility worldwide. As a leader in innovative lighting solutions, we are dedicated to products and processes that contribute to solving global sustainability challenges, address economic needs and protect the environment for today and for the future.

Aggressive goals set for our company

2007:

- 10% energy reduction at all our facilities
- Begin elimination of PVC plastic from packaging
- ISO 14001 for all manufacturing facilities by 2008

2008:

- Additional 7% energy reduction at all our facilities
- Begin to eliminate lead in ballasts
- Benchmark greenhouse gas emissions from facilities and fleet

2009

- Additional 5% energy reduction at all our facilities
- Begin to eliminate remaining lead from fluorescent lamp fill tubes
- Expand online lamp recycling program into Canada

2010

- Create company-wide Green Team
- Set absolute GHG emissions reduction: 10% over 5 years
- Completely eliminate lead from linear fluorescent lamps



Environmental Sustainability is Built Into OSRAM SYLVANIA Business Practices

Our commitment goes beyond the bulb

Processes

- Elimination of ozone-depleting epoxy and coatings that produced VOCs
- Installation of mercury filter system to eliminate over 3,400 gallons of hazardous waste water
- Recovery processes that improve discharge air and water quality
- Water-based phosphor coating units at fluorescent lamp plant
- 90% reduction in certain emissions over the past 10 years
- Chemical solutions from glass frosting process are reused at glass plant
- Oil filtration system at glass plant reduced 1,500 gallons of oil per year
- Lighting upgrades and other efficiency improvements at plants and DCs
- 10% absolute corporate greenhouse gas emissions reductions target set

Transportation

- No-idling and speed management policies at all facilities and for SLS fleet
 - Combined annual savings of over 130,000 gallons of diesel fuel, 3 million pounds of CO2 and over 50,000 pounds of Nox
 - 20% of fleet upgraded annually. New trucks were equipped with diesel oxidation catalysts and EPA 2007 engines even prior to regulations
- Smaller size lamps like the Micro-Mini CFL result in 40% less transportation-related air pollution
- SmartWay Certified vehicles required in sales fleet
- Founding member of North Shore Transportation Management Association

Products and Packaging

- Reduced and eliminated lead and mercury
 - Lowered mercury levels by up to 92% in most fluorescent lamps
 - Pioneered the use of lead-free solders and welded lamp bases for our lamps
 - Eliminated lead from glass for many products
- Eliminated use of orange stretch wrap for pallet packing per request of customer (now clear, so recyclable)
- 90% of high volume packaging is made from post-consumer or post-industrial recycled materials
- We use non-solvent inks in our packaging printing

Recycling

OSRAM SYLVANIA has always promoted lamp recycling as the most responsible method for disposal

- Launched industry-first online lamp recycling program for end-users in 2006
www.sylvania.com/recycle
- SLS contracts account for 6% of all recycled lamps in the US annually
 - 9 million lamps sent to recyclers
- Each of our facilities has implemented waste recycling programs
- Green Team shares best practices within facilities



Proud of our Partnerships

ENERGY STAR Partner since 1999



- Partner of the Year 8 times in a row
- 95% of our CFLs carry the ENERGY STAR label

EPA SmartWay Transport Partner since 2008



- Reduce environmental impact of our supply chain
- Reduced CO₂ Output by Non-Smartway Carriers by 83%
- All leased sales vehicles carry SmartWay certification

EPA Climate Leaders Partner 2007



- Benchmark corporate greenhouse gas emissions
- Set 10% absolute reduction goal between 2006 and 2011

Department of Energy Save Energy Now Leader 2009



- One of 32 manufacturing companies in the US
- Commitment to reduce energy use by 25% over 10 years



Thank You



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